Public Health Infection Prevention- Hot topics!

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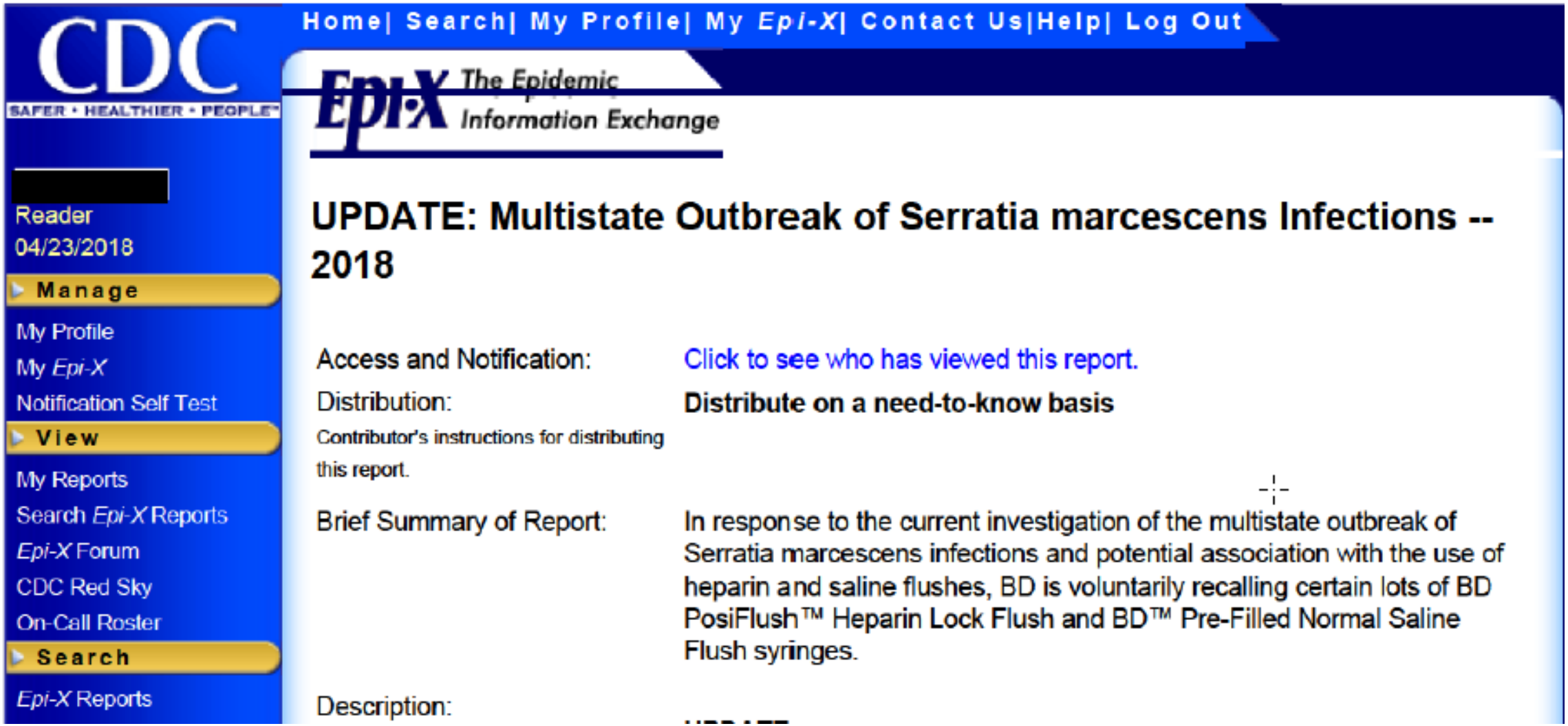
Health Alert Network-HAN

Why do I get alerts?


CDC
SAFER • HEALTHIER • PEOPLE™
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Epi-X The Epidemic Information Exchange
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Reader
04/23/2018
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Notification Self Test
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UPDATE: Multistate Outbreak of Serratia marcescens Infections -- 2018
Access and Notification:
Click to see who has viewed this report.
Distribution:
Distribute on a need-to-know basis
Contributor's instructions for distributing this report.
Brief Summary of Report:
In response to the current investigation of the multistate outbreak of Serratia marcescens infections and potential association with the use of heparin and saline flushes, BD is voluntarily recalling certain lots of BD PosiFlush™ Heparin Lock Flush and BD™ Pre-Filled Normal Saline Flush syringes.
Description:

Epi-X The Epidemic Information Exchange

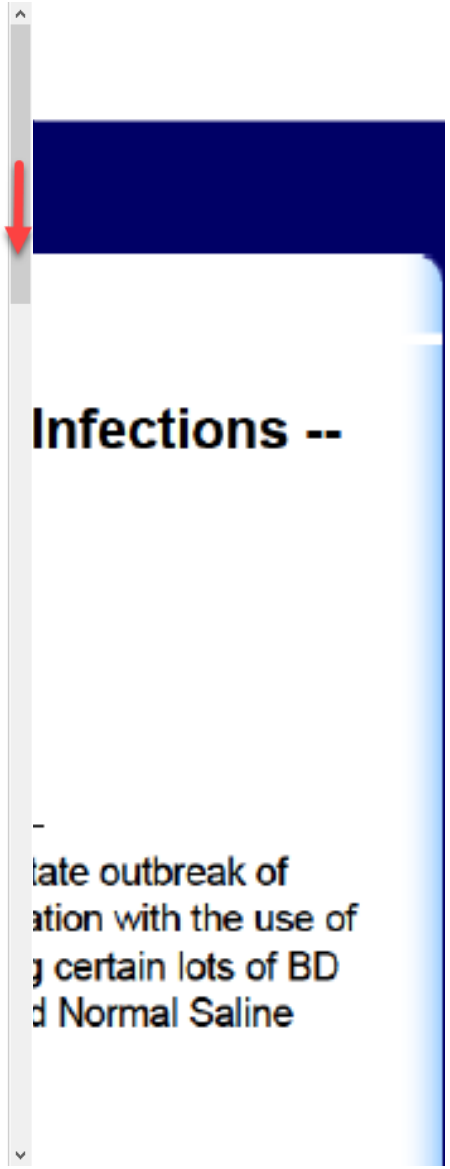
Burkholderia cepacia complex Infections Associated with Use of Medline Remedy Essentials No-Rinse Foam -- 2018

Access and Notification:	Click to see who has viewed this report.
Distribution:	**Distribute on a need-to-know basis**
Contributor's instructions for distributing this report.	
Brief Summary of Report:	CDC is providing support to state and local health departments in the investigation of two clusters of Burkholderia cepacia complex (Bcc) infections at two acute care hospitals in Pennsylvania and California occurring between November 2017 and March 2018.

Description:

CDC is providing support to state and local health departments in the investigation of two clusters of *Burkholderia cepacia* complex (Bcc) infections at two acute care hospitals in Pennsylvania and California occurring between November 2017 and March 2018. As of March 23, 2018, five of the ten patients from the Pennsylvania cluster and six of the eight patients from the California cluster have had Bcc isolated from urine; other body sites positive for Bcc included wounds and sputum. No patients in either cluster had cystic fibrosis. The ongoing investigation has identified a potential association between Bcc infection and Medline Remedy® Essentials No-Rinse Foam, a product used for skin and perineal care in both facilities.

Samples of the product were collected at the Pennsylvania facility from lots M05703/7235 and M06691/7256 which tested positive for Bcc. However, it is not known which lots were used on the patients who developed infections. Molecular testing on clinical and product isolates indicate that they are closely related. Cultures from additional product are pending.



Call for Cases: Infections Following Injections and Infusions with an Umbilical Cord Blood Product Marketed as a Stem Cell and Growth Factor Treatment October 2018

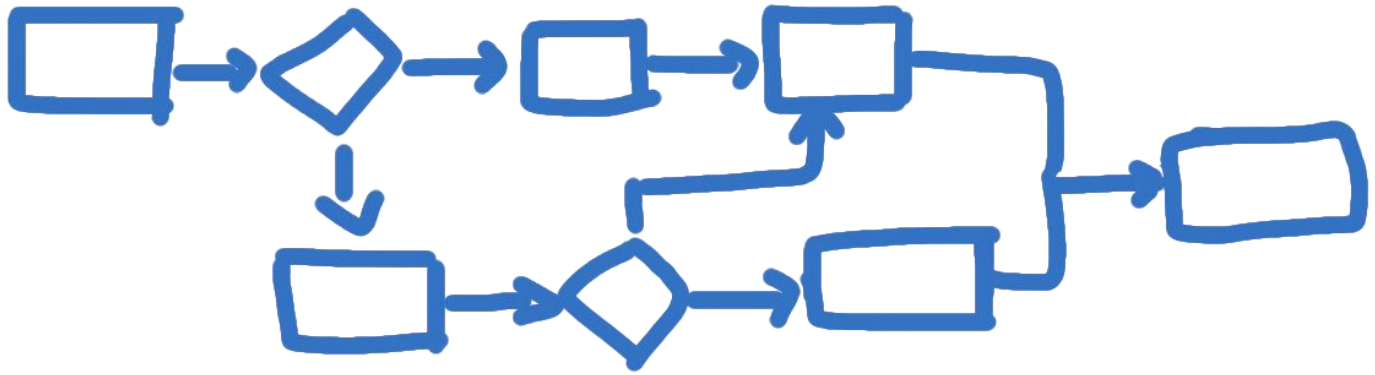
CDC and FDA are working with state and local health departments to investigate bacterial infections in Texas and Florida following injections and infusions with umbilical cord blood product distributed by Liveyon and manufactured by GeneTech Inc. The Florida Department of Health has identified four patients with septic arthritis who had received outpatient injections of Liveyon's umbilical cord blood product between February 15 and August 30, 2018. *Escherichia coli* was isolated from synovial fluid cultures from all four patients; additional organisms were isolated from cultures of three patients, including *Enterococcus faecalis* (2) and *Proteus mirabilis* (1). *E. coli* and *E. faecalis* were also isolated from an unopened vial of Liveyon's umbilical cord blood product obtained from one clinic. Additional product testing is ongoing. The Texas Department of State Health Services has identified three patients hospitalized with bloodstream infections following injections or intravenous infusions of Liveyon's umbilical cord blood product at an outpatient clinic on September 12, 2018. *Enterobacter cloacae* was isolated from blood cultures from all three patients; *Citrobacter freundii* was isolated from a blood culture from one of the patients. Product testing is ongoing.

Liveyon has voluntarily recalled umbilical cord blood products:

https://www.fda.gov/BiologicsBloodVaccines/SafetyAvailability/Recalls/ucm622190.htm

Process

- EPI-X call for cases
- Michigan call for cases
- MDSS unusual occurrence
  - Outbreak identifier



- Michigan is always involved!
  - Most recently VIM CRPA

VIM- CRPA: 2018-2019

- CDC investigating VIM-CRPA from U.S Patients with Recent Invasive Procedures in Mexico
- As of April 10, 2019
  - 32 confirmed cases from 17 states- none in MI
  - 12 suspect cases from 9 states- none in MI
- Patient Demographics
  - Median age: 42 years (range: 23-62)
  - Specimen sources: wound, abdomen, blood and back

Patient Healthcare Exposures among confirmed cases (N=19, 3/10/2019)

- 17 reported surgery, of which 14 were bariatric and 4 did not specify surgery type
  - 16 had surgery between 8/21/18-2-4-19
  - 1 patient identified retrospectively had surgery in 2015
  - 6 different hospitals reported
    - 5 hospitals reported by 1 patient each
    - 1 hospital reported by 14 patients
  - 1 had ERCP in Tijuana, Mexico after becoming acutely ill while traveling

Infection Control at Grand View Hospital

- Mexican authorities conducted assessment on 12/4/18
- Evidence of Category B breach: facility did not follow recommended procedures for assuring the quality of sterilization processes

Review of Public Health Notifications

Federal Notifications

- EpiX posted 11/19/18
- Partner notifications 12/13/18
- Alert level-2 travel notice posted by CDC DGMQ- January 2019

https://wwwnc.cdc.gov/travel/notices/alert/drug-resistant-infections-mexico

Statewide Notification

- HAN 2/22/2019
  - Report cases to SHARP
  - Use outbreak id "**VIMPA2019"** in MDSS

Public Health Response

- Goals
  - Ensure patients who develop infections get prompt and appropriate treatment
  - Prevent spread of VIM-CRPA in U.S Hospitals
- Actions
  - Weight Loss Agents (WLA), on 2/15/19, provided electronic notifications to >620 US residents that it referred to Grand View Hospital since 8/1/2018
  - Notification addressed ongoing risk of infection of infection caused by VIM-CRPA and potential bloodborne pathogen exposure
  - MI received list of patients who traveled to Mexico with WLA N=16
  - MDHHS worked with LHDs to administer CDC questionnaires to high priority patients (Surgery since January 2019)
  - Assess whether exposed patients developed infections or have been hospitalized since procedures

Infection Control Assessment and Response

ICAR

ICAR Goals

- Increase patient safety
- Expand infection control resources
- Increase the number of infection control consultations provided by the SHARP unit

Methods

- Used a CDC tool to conduct infection control needs assessments

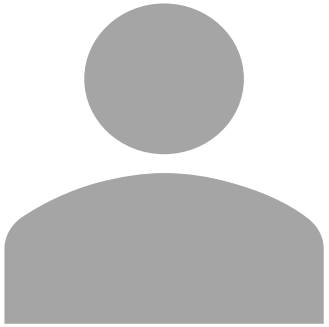
- Review facility practices:
  - Infection Control Infrastructure
  - Infection Control Training, Competency, and Implementation of Policies and Practices
  - Systems to Detect, Prevent and Respond to Healthcare-Associated Infections and Multi-Drug Resistant Organisms

Assessment and Response

Discuss findings with Infection Preventionists and other staff

Strengths

Areas for opportunity



Report individual facility findings

Aggregate findings

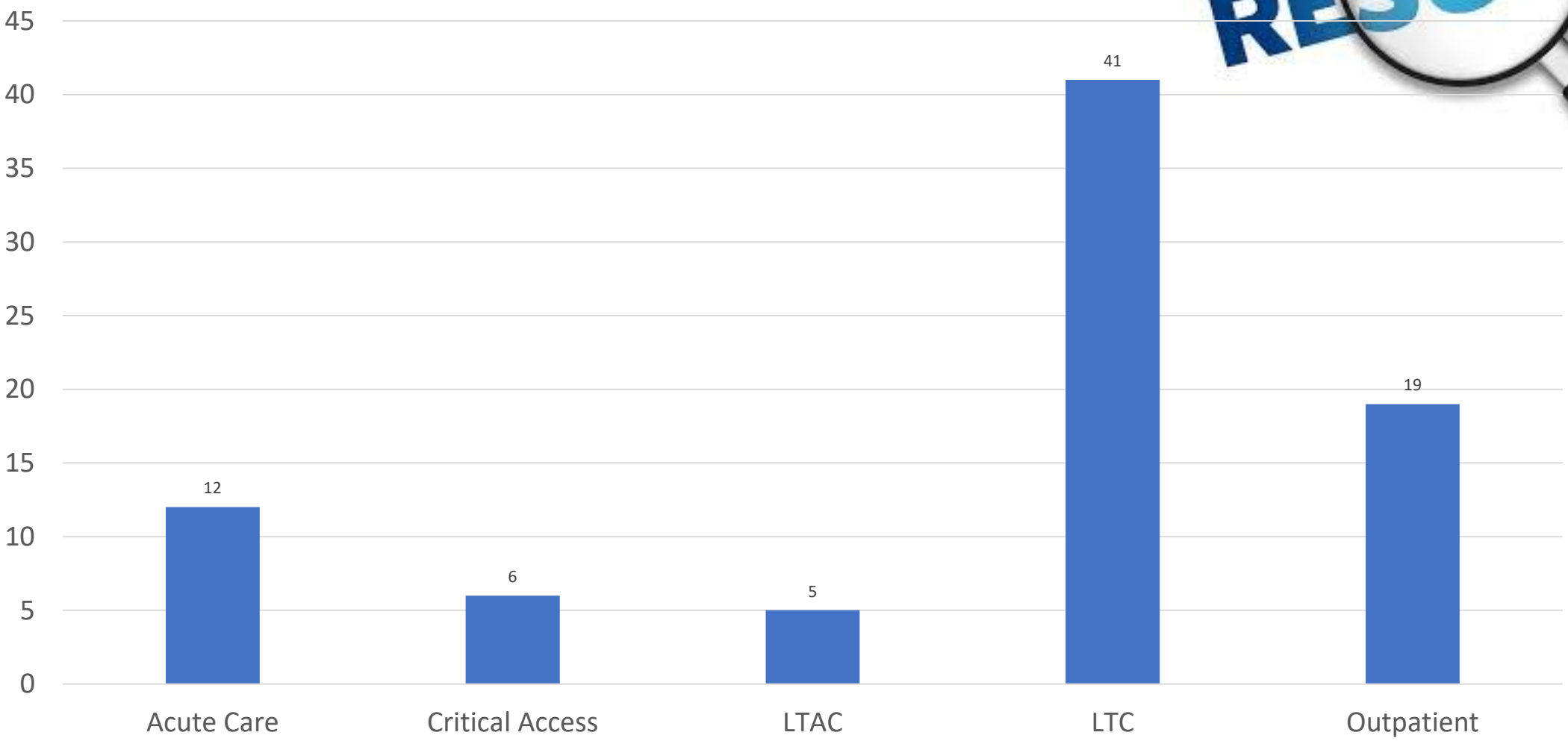
Facility Recruitment: 2015-2018

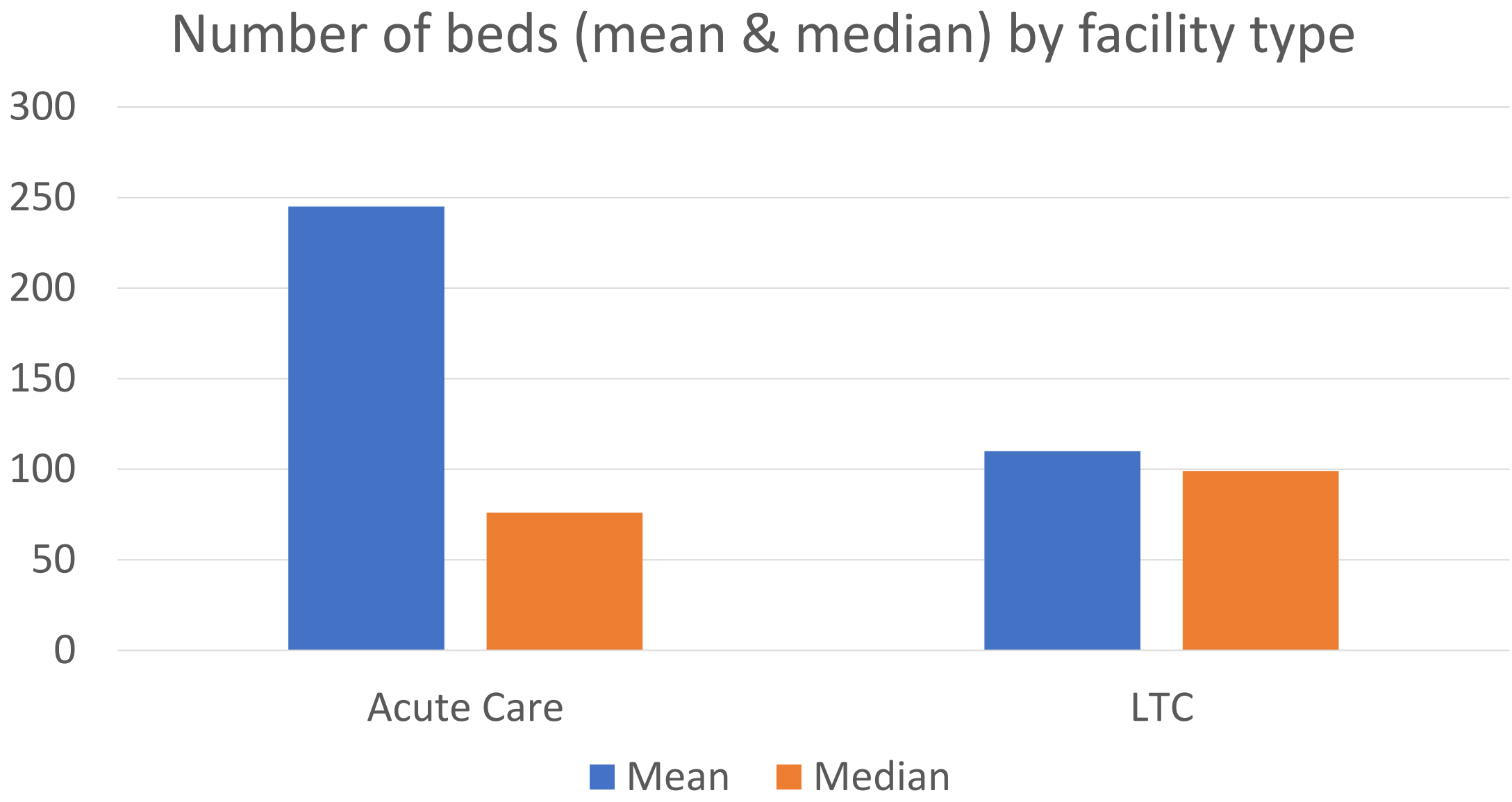
- Voluntary participation
- Collaborative, NOT regulatory
- Advertised to interested facilities:
  - Website, flyers, emails
  - Professional societies (e.g. MSIPC, APIC GL, HCAM)
  - Meetings and conference presentations

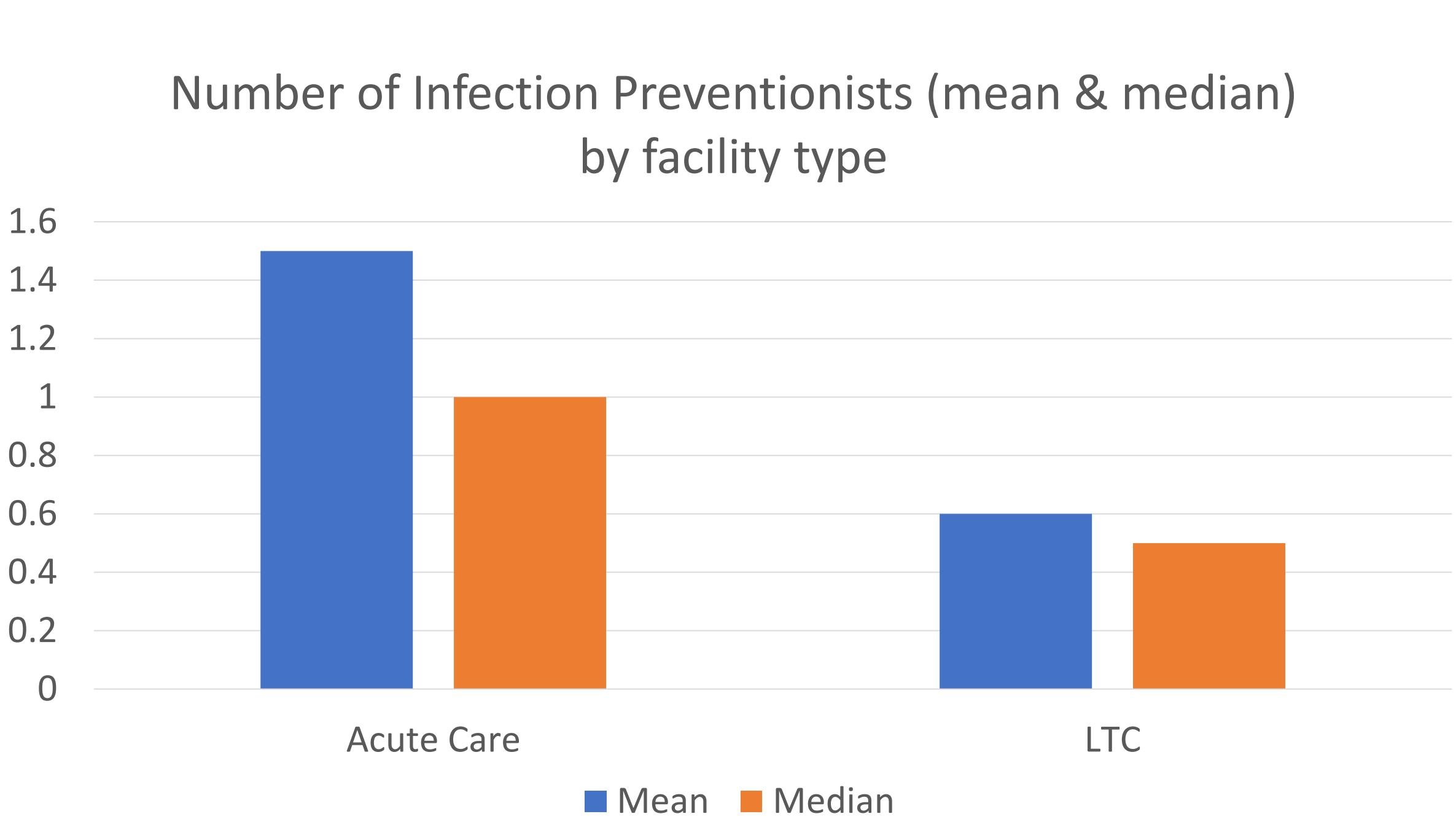
Facility recruitment: 2019-

- Response to HAI outbreak
- Response to identification of a novel organism
- Volunteer!

Number of ICARs Conducted by Facility Type- Michigan 2015-2018




Number of beds (mean & median) by facility type
300
250
200
150
100
50
0
Acute Care
LTC
Mean
Median


Number of Infection Preventionists (mean & median) by facility type
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
Acute Care
LTC
Mean
Median

Results

- Gaps were common
- Assessments identified at least 1 gap in each facility
- Competency-based training programs both upon hire and annually
  - Hand hygiene
  - PPE
  - UC insertion and maintenance
  - Catheter insertion and maintenance
  - Injection Safety
  - VAE prevention
  - Environmental cleaning

Results

- Acute Care:
  - Audit/feedback programs for
    - UC insertion and maintenance
    - Central line insertion and maintenance
    - VAE prevention
  - Transfer forms
    - Transfer out to another facility
    - Prior to accepting from another facility

Long-Term Care

- 95% of facilities had at least 1 gap in Antimicrobial Stewardship
  - Meet those Core Elements!
  - Staff education and training
- 70% do not have policies/procedures in place to ensure reusable medical devices are cleaned and reprocessed appropriately

Outpatient facilities

- 79% did not have at least 1 person training in infection prevention
- 67% do not have a process to preform initial cleaning of devices prior to transport to off-site reprocessing

Lessons Learned

No program is perfect—always room for improvement

Infection prevention involves a lot of departments- get to know your colleagues!

ICAR is a great tool and free resource to enhance your program

Infection Control Assessment and Response (ICAR)

Evaluate your infection control program!

- ✓Collaborative NOT regulatory
- ✓Focus on quality improvement- patient safety is our primary goal
- ✓Free consultation
  - Conducted on-site or over the phone
- ✓Strengthen your Infection Control program
  - Add another tool to your resources
- ✓Chance to help guide national training efforts- aggregate results from this needs assessment will help direct development of infection prevention education and training
- ✓Hospitals (long-term acute care, acute care and critical access)
- ✓Long-Term Care

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Thank you!